International Journal of Sports Science and Physical Education
2024, Vol. 9, No. 2, pp. 26-30
https://doi.org/10.11648/j.ijsspe.20240902.11

Research Article

Major Psychological Factors Affecting Short Distance Athlete's Performance in Hadiya Zone Athletics Projects

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Abstract

This study is explored the major psychological factors like personality and anxiety affects short distance athlete's performance of Hadiya Zone athletics projects. The researcher was used both probability and non-probability sampling technique. Used stratified sampling techniques for athletes and available / census for all coaches and sport experts. The population of the study consisted of athletes (n=83), coaches (n=4) and all sport experts (n=8). The study employed the Cross-sectional survey design. Data were analyzed by both descriptive and inferential statics methods were employed. Personality and anxiety psychological factors were assessed by using the Inventory, standard questionnaire. Athlete's athletic performance was assessed by document analysis. Descriptive Statistics percentage, standard deviation, mean were used for assessing back ground information, the current anxiety level and influence personality factors. Multiple regression coefficients from inferential statics were used to show the influence of major psychological factors on athlete's performance. The finding of this study indicates the current anxiety level with aggregate mean (M=3.147) implies moderate, and influence of personality factors on this study with aggregate mean (M=3.142) shows that moderate. And, also athletic anxiety and personality factors on performance of athletes' multiple regression coefficient results indicates, by 40.1% of variance (R^2=.165, F = 8.194, *p <.05) predict athletes' performance.

Keywords

Athletics, Personality, Anxiety, Athlete, Performance

1. Introduction

1.1. Background of the Study

Athletics sport is an exclusive collection of sporting event that involve competitive running, jumping, throwing and walking. The most common type of athletics computations are track and field, road running, cross country running and race walking. In addition to this, the 5km, 10 km, half-marathon, and marathon races are all classified as long distance running events [12].

Athletics is various disciplines have evolved under a conventional structure in which the coach athlete partnership takes full responsibility for preparing training and Competitions, avoiding the presence of any other professionals. Nowadays, elite athletes are usually accompanied by mangers, masseurs, physiotherapists, doctors and, in some cases psychologists. Traditionally coaches and athletes have focused their efforts on physical training. Over time, however, the technical, tactical and psychological aspects the technical, tactical and psychological aspects have gained more im-

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Received: 5 April 2024; **Accepted:** 8 May 2024; **Published:** 13 June 2024

portant role. Despite psychology being perceived as one of the key factors to peak performance and wellbeing in sport, few systematically train this aspect [6].

The Ethiopian Athletics Federation along with Regional Federations are striving their best for the development and expansion of athletics sport in different parts of Ethiopian regions. There are over 35 athletics training centers opened by EAF and more than 30 athletes in each club and have functional persons whom are involved in the training centers [7].

However as this intent on gaining victory lacks a broad base and replenish capable athletes in more diverse athletics sub-disciplines; organizing youth athletic sports training projects in selected talented areas of the country remains the only alternative. For the same reason, after conducting talent identification program, the National Athletics Federation, had announced that the Southern Nations, Nationalities, and Peoples' Region State (SNNPR), was the hub of short distance and field event athletic sports, in which the county has not been successful. Following this, the SNNPR State Youth and Sports Bureau have been running athletics sports training since 2011 for selected talented athletes of age 15-17, in close consideration of athletic sports sub disciplines that the county has not been successful [4].

Athletes may experience psychological disorders, such as stress, worry, anxiety as well as motivation and concentration disorders during in season training intended for gaining technical skills and condition. Anxiety experienced during competition is one of the emotional states that negatively affect the performance of athletes. Anxiety causes athletes to suffer from muscle tension, difficulty in making decisions, confusion, low efficiency in training, inability to focus, lack of self-confidence, low concentration etc. During periods close to competition, athletes in sprint branch of athleticism have to apply various strict diets in addition to intensive training programs [5].

Typically defined as "an unpleasant psychological state in reaction to perceived stress concerning the performance of a task under pressure", anxiety is a common emotional state experienced by athletes at all levels of performance. In general, anxiety is made up of cognitive (e.g., worrying thoughts and apprehensions) and somatic (e.g., degree of physical activation) components. Anxiety can manifest itself as a stable part of one's personality known as trait anxiety, or as a temporary, more malleable, situation specific state anxiety. In athletic context, anxiety is often regarded as a typical response to a situation where an athlete's skills are being evaluated. Anxiety is often characterized by a range of physiological (e.g., sweating, increased heart rate), behavioral (e.g., biting fingernails, fidgeting), and cognitive (e.g., negative thoughts, inattention) signs and symptoms [3].

Individual differences at the psychological level make each athlete unique. They are useful for explaining and predicting behavior and performance. Acquiring a comprehensive understanding of individual differences in athletic activity would help to consider each athlete with athletes' own particularities, to understand athletes better, in order to help an athlete to reach a higher performance. Personality-trait-like individual differences are of main importance in athletic activity, and how they might affect performance. Mental toughness, perfectionism, emotional intelligence and hardiness are such individual differences linked to personality, which were found in recent scientific studies to predict athletes' performance [10].

Athletic performance linked to personality is that of coping behavior and strategies. This relates to the ability or techniques used by an athlete to deal with psychological stressors such as anxiety. Athletes have to learn to live up to our expectations. Athletes are required to be cooperative and competitive to accept victory and defeat in athletic manner, to demonstrate sense of fair play and to be socially outgoing. Personality itself can influence many aspects of athletic performance and behavior, some of which may well be out of the athlete's cognitive control. Personality is important to understand personality if dealing with athletes to promote the best coping strategies and goals to assist in improving their performance [2].

Athlete we need to have different performance strategies. [15] Stated that, each athlete brings to the specific sport completion a set of physiological and psychological strategies. A performance strategy includes that attributes that the Athlete brings to the competition, (e.g. body mass, height, muscle fiber type, and anxiety levels). Genetic inheritance, along with training, contributes to the status of the available strategies. How the Athletes uses them or integrates them in a performance dictates the degree of success. The determinants of success in each sport have changed as rules have changed in many sports, however, success can build on several attributes once the sports skills are solid in athletics. Most sports have complex demand; One Athlete may succeed using one set of strategies while another succeeds in the same sport using a different set. Sports today are a function of genetic in heritance, accomplished sport skills, psychological skills, and physical conditioning [1].

The short distance running event in athletics, the 100m sprint requires the athlete to start well, leaving the block with vast power and speed. The current best performance time of 100m is -9.58 sec and 200m short distance best performance time is -19.19 sec. This best performance record is still now hold by Husain Bolt (Jamaica) -9.58 sec at Berlin Olympic and 200m best time -19.19 sec hold by Husain Bolt in 1986 at Berlin Olympic. The 400m best performance 0f men -43.03 sec by South African athlete Way devanNiekerk in 2016 at Rio de Janeiro (Brazil) (Organization of International Athletics Federation).

World records in athletics are ratified by the International Association of Athletics Federations. Athletics records comprise the best performances in the sports of track and field, road running and race walking.

Based on this our world current best performance of female athletes in 100m and 200m race respectively -10.49 sec and

-21.34 sec in 1988 at Indianapolis, in (USA) and Seoul/Korea (Olympic Stadium) (Organization of International Athletics Federation).

In Ethiopia athletics history, Hadiya Zone athletics project has produced competitive and famous athletes like Fantu Megiso; gold medalist in 800m, 2012 in Rome, and others at the national clubs that computing at the international level. After all, the main concern of this study is to reduce and avoid the problems of the project related to psychological factors like anxiety and personality on athlete's performance, so that the projects were provide athletes with optimistic and talented future, both for national and international levels [7].

1.2. General Objectives

The general objective of the study will to investigate the major psychological factors Affecting the performance short distance of athlete's trainees in the case of Hadiya Zone athletics project.

1.3. Specific Objectives

The specific objectives of the study were:

1) To find out the current anxiety level of short distance athlete in Hadiya zone athletics projects.
2) To assess personality factors on the performance of Hadiya Zone athletics project athletes'.
3) To explore personality and anxiety influence on the performance of sprinters in Hadiya Zone athletics projects.

2. Research Design and Methodology

This study was design to study the major psychological factors anxiety and personality affecting short distance athlete's performance in some selected athletics projects of Hadiya Zone. Purposely, the cross-sectional survey design was appropriate for this study. This design is best appropriate to studies aimed at finding out the popularity of a phenomenon, situation, problem, attitude or issue, by taking a cross-section of the population. They are useful in obtaining an overall 'picture' as it stands at the time of the study. It is extremely simple in design and you decide what you want to find out about, identify the study population, select a sample (if you need to) and contact your respondents to find out the required information.

Because a descriptive study concerned with setting or relationships that exist, opinions that are held, processes that are going on, property that are evident, or trends that are developing. It is primarily concerned with the present, although it often considers past events and influences as they relate to current conditions [14]

2.1. Sources of Data Collection

Both primary and secondary data sources were used in this study. Primary sources were collected through questionnaire, interview and observation to obtain consistent information for the current study. Secondary source of data includes books, journals, internet, different researches, records of athletes' profiles, and report files were the secondary sources of data in which the relevant information were gained to be the sources of data. Secondary data is used to form rationales for the research and to support or counter-argue the research findings. Secondary data may either be published data or unpublished data [9].

2.2. Sample and Sampling Techniques

This study was conducted purposively in Hadiya Zone 3 athletics projects under three Woreda; namely, Mesha, Soro, and Duna with total population of each projects have 34, 28 and 28 athletics trainers, respectively, which sum up 100. Therefore, the target population consists of 4 Zones' Sport experts, 4 Woreda Sport Officers, 4 Athletics Projects Coaches and 100 trainees of the selected athletics projects were used as a source of data for the purpose of the study.

From the target Woreda of the study, sample size was determined by applying the formula of [16] for proportional allocation. As mentioned above the total population of each project had been 34, 28 and 28 for Mesha, Soro and Duna, respectively. Based on this, from each project namely Mesha, Soro and Duna sample size with 31, 26 and 26 athletes' were selected by stratified sampling techniques, respectively, which sum up 83 trainers. However, officers/ sport experts both from Zone and Woreda level were taken as available sample and similarly, coaches were sampled as available sample i.e. 4 coaches, 4 Woreda Sport Officers and 4 Sport experts from Hadiya Zones with census /available sampling techniques, because the researcher was used this sampling techniques to get full and real data / information from the concerning body.

Table 1. *Summary of sampling size and Sampling techniques.*

Target study area	Population			Sample size		Sampling technique
	M	F	T	№	%	
Mesha			34	31	91.7	Stratified sampling

Target study area	Population			Sample size		Sampling technique
	M	F	T	№	%	
Soro	12	16	28	26	92.85	availability / census
Duna	12	16	28	26	92.85	
Coaches	4	-	4	4	100	
Sport experts	6	2	8	8	100	
Total				95	95	

Survey of 2019

2.3. Data Collection Procedure

In order to collect data necessary for analysis, the researcher was used questionnaire, structured observation and in-depth interviews were implemented to maintain the validity of the study and to gather information from different sources. The use of different instrument will help to see the situation in detail. The detail of each data collection method is discussed as followed.

2.3.1. Questionnaire

Standardized and structured questionnaire of Personality was assessed by using revised NEO personality inventory (NEO-PI-R), [13] and the Sport Anxiety Scale-2 [11] measures cognitive and physical symptoms of anxiety associated with athletic performance. However, the SAS-2 has shown good validity and reliability for both adults and youths [8] Observation and interview that cover the objective of the study were developed and administered to the respondents. Collection of data through questionnaires is quite popular, particularly in case of big enquiries. It is being adopted by private individuals, research workers, private and public organizations and even by governments. A questionnaire consists of a number of questions printed or typed in a definite order on a form or set of forms. The respondents have to answer the questions on their own. The reliability coefficients of personality inventory were found 0.737. It is found to be in the range of 0.706 - 0.809 which shows high reliability. For reliability of data scales for trait anxiety, cognitive state anxiety, somatic state anxiety, and state (Cronbach's alpha = 0.89, 0.81, and 0.81 respectively).

2.3.2. Interview

Structured interview was conducted for sport experts respondent or participants of the study to cover objectives of study. The interview is in a sense an oral questionnaire. Instead of writing the response, the subject or interviewee gives the needed information orally and face-to-face (or via the telephone). Advantage of interviewing is that the interviewer can explain more explicitly the investigation's purpose and just what information the researcher wants.

2.3.3. Observation

This data collection instrument was used to observe trainees' personality, anxiety and psychological conditions of athletes and the ability to overcoming obstacles, and the role of coaches' in helping trainees' psychological problems, and the general capability of the coaches during training sessions. In case the observation is characterized by a careful definition of the units to be observed, the style of recording the observed information, standardized conditions of observation and the selection of pertinent data of observation, then the observation is called as structured observation. Structured observation is considered appropriate in descriptive studies, whereas in an exploratory study the observational procedure is most likely to be relatively unstructured.

2.4. Method of Data Analysis and Data Presentation

The collected data were analyzed both quantitatively and qualitatively. The analysis of the data was based on the responses that were collected through questionnaires, interviews, and document analysis. The qualitative data collected from different sources were summarized, categorized and coded to suit for analysis. The data collected from athletes and coaches, through questionnaire (the quantitative one) was processed and analyzed using Statistical Package for Social Science (SPSS) version 20 likes tools percentage, mean, standard deviation, and from inferential statics the researcher was used step wise multiple regression coefficient used to analyze the data.

3. Conclusions

This study has revealed that as the analysis of the collected data revealed the trainees are moderately affected in some anxiety and personality factors. Meanwhile, the coaches' role to avoid such anxiety factor in project is not as expected, this

show the psychological skill gape of steak holders. The study has shown in some extent that there are no psychological treatment strategies on their short and long term plans. Trainers who are developed well in psychological skill, those that were alleviate their performance level in relation their own long term plan and goals.

In general, in some extent of lack of sport psychology knowledge and absence of specific planned documents in related to psychological problems that are helpful to undertake the project resulted in psychological problems up on trainees specially the situation negatively affect the performance of trainees towards taking training properly.

As the data indicated the trainers are working together to achieve common goals. Therefore, they can perform training together and they were used psychological skill training before, after and during training. This unity also helps them to improve their performance and psychological skill. The training groups value membership and have close relationship with each other. Hence, they can share experience with peers easily. Then everybody can improve the skill of psychology.

Author Contributions

Abraham Bekele Taramo: Conceptualization, Data curation, Formal Analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing

Israel Etefa Abosha: Conceptualization, Data curation, Formal Analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing

Conflicts of Interest

The authors declare no conflicts of interest.

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